



Volume I

Draft

# Environmental Impact Report and Environmental Impact Statement

## DELTA WETLANDS Project

Prepared for:



State Water Resources Control Board  
Division of Water Rights

and



U. S. Army Corps of Engineers  
Sacramento District

Prepared by:



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**Draft**

**Environmental Impact Report  
and  
Environmental Impact Statement  
for the  
Delta Wetlands Project**

**Volume I**

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## List of Acronyms and Abbreviations

1978 Delta Plan	1978 Water Quality Control Plan for the Sacramento-San Joaquin Delta and Suisun Marsh
1991 Delta Plan	1991 Delta Water Quality Control Plan for Salinity, Temperature, and Dissolved Oxygen
1995 WQCP	1995 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary
$\mu\text{g/l}$	micrograms per liter
$\mu\text{g/mg}$	micrograms per milligram
$\mu\text{g/m}^3$	micrograms per cubic meter
$\mu\text{S}$	microsiemens
$\mu\text{S/cm}$	microsiemens per centimeter
AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
af	acre-foot
af/kWh	acre-feet per kilowatt-hour
Anlab	Analytical Laboratory
AOP	annual operating plan
APE	area of potential effect
ARB	California Air Resources Board
ARMR	Archaeological Resource Management Report
Arvin-Edison	Arvin-Edison Water Storage District
BA	biological assessment
BAAQMD	Bay Area Air Quality Management District
Bay-Delta	San Francisco Bay/Sacramento-San Joaquin Delta
bhp	brake horsepower
BLM	U.S. Bureau of Land Management
Br	bromide
Br/Cl	ratio of bromide concentration to chloride concentration
Br-THM	bromine portion of trihalomethane molecules
Bti	<i>Bacillus thuringiensis israelensis</i>
Ca <sup>2+</sup>	calcium ion
CALFED	California Governor's Water Policy Council and Federal Ecosystem Directorate
Caltrans	California Department of Transportation
CCCCDD	Contra Costa County Community Development Department
CCCGP	Contra Costa County General Plan
CCMAD	Contra Costa Mosquito Abatement District
CCR	California Code of Regulations
CCWD	Contra Costa Water District
CDC	California Department of Conservation
CDFA	California Department of Food and Agriculture
CDFP	cross-Delta flow parameter
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CH <sub>4</sub>	methane
CHBr <sub>3</sub>	bromoform
CHCl <sub>3</sub>	chloroform
CHCl <sub>2</sub> Br	dichlorobromomethane

CHClBr <sub>2</sub>	dibromochloromethane
Cl <sup>-</sup>	chloride
Cl <sub>2</sub> /DOC	ratio of chlorination to dissolved organic carbon concentration
Cl/EC	ratio of chloride concentration to electrical conductivity
Cl-THM	chlorine portion of trihalomethane molecules
Cl <sub>2</sub>	chlorine
cm	centimeters
CNPS	California Native Plant Society
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
COA	Coordinated Operations Agreement
Corps	U.S. Army Corps of Engineers
COTP	California-Oregon Transmission Project
CT	concentration time
C-THM	carbon portion, or carbon equivalent, of total trihalomethane concentration
CVHJV	Central Valley Habitat Joint Venture
CVOCO	Central Valley Operations Coordinating Office
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
CVRWQCB	Central Valley Regional Water Quality Control Board
D-1485	Water Right Decision 1485
DailySOS	Daily Standards and Operations Simulation model
DBP	disinfection byproduct
DCC	Delta Cross Channel
Delta	Sacramento-San Joaquin Delta
DeltaDWQ	Delta Drainage Water Quality model
DeltaSOS	Delta Standards and Operations Simulation model
DeltaMOVE	Delta Movement of Organisms Vulnerable to Entrainment model
DFA	California Department of Food and Agriculture
DFG	California Department of Fish and Game
DHS	California Department of Health Services
DIDI	Delta Island Drainage Investigations
DMC	Delta-Mendota Canal
DO	dissolved oxygen
DOC	dissolved organic carbon
DPR	California Department of Parks and Recreation
draft D-1630	draft Water Right Decision 1630
draft WQCP	draft Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary
DRP	data recovery plan
DSOD	Division of Safety of Dams
DW	Delta Wetlands
DWR	California Department of Water Resources
EA	environmental assessment
EBMUD	East Bay Municipal Utility District
EC	electrical conductivity
EIR/EIS	environmental impact report/environmental impact statement
EO	executive order
EPA	U.S. Environmental Protection Agency
ERC	emission reduction credit
ET	evapotranspiration
FEMA	Federal Emergency Management Agency
fps	feet per second

FR	Federal Register
FTE	full-time equivalent
g/m <sup>2</sup>	grams per square meter
g/m <sup>3</sup>	grams per cubic meter
g/cm <sup>3</sup>	grams per cubic centimeter
HDPE	high-density polyethylene
HEP	habitat evaluation procedures
HLA	Harding Lawson Associates
HMAC	Habitat Management Advisory Committee
HMP	habitat management plan
HPMP	historic properties management plan
HSI	habitat suitability index
HU	habitat unit
I-5	Interstate 5
IDHAMP	Interagency Delta Health Aspects Monitoring Program
IEP	Interagency Ecological Program
IFM	important farmland mapping
Interior	U.S. Department of the Interior
JSA	Jones & Stokes Associates
K <sup>+</sup>	potassium ion
kg	kilogram
km	kilometer
kV	kilovolt
kWh	kilowatt hour
l/cm	liters per centimeter
LAFCO	Local Agency Formation Commission
LCC	land capability classification
LOS	level of service
m	meter
MAD	mosquito abatement district
MAF	million acre-feet
MAF/yr	million acre-feet per year
MCL	maximum contaminant level
MDO	Minimum Delta Outflow computer subroutine
Mg <sup>2+</sup>	magnesium ion
mgd	million gallons per day
mg/g	milligrams per gram
mg/l	milligrams per liter
ml	milliliter
MLD	Most Likely Descendants
mm	millimeter
MOA	memorandum of agreement
MOU	Memorandum of Understanding
mph	miles per hour
mS/cm	millisiemens per centimeter
MSD	marine sanitation device
msl	mean sea level
MWD	Metropolitan Water District of Southern California
MWQI	Municipal Water Quality Investigations
Na <sup>+</sup>	sodium ion
NAHC	California Native American Heritage Commission
NBHA	North Bouldin Habitat Area
NDDB	Natural Diversity Data Base

NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
nm	nanometer
NMFS	National Marine Fisheries Service
NO <sub>3</sub>	nitrate
NOAA	National Oceanic and Atmospheric Administration
NOI	notice of intent
NOP	notice of preparation
NO <sub>x</sub>	oxides of nitrogen
NRCS	U.S. Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSR	New Source Review
NTU	nephelometric turbidity units
OHP	Office of Historic Preservation
PA	programmatic agreement
PAR	PAR Environmental Services
PBS	Public Broadcasting System
PCPA	Pesticide Contamination Prevention Act
PG&E	Pacific Gas and Electric Company
PM10	particulate matter smaller than or equal to 10 microns in diameter
PO <sub>4</sub> <sup>3-</sup>	phosphate
POC	particulate organic carbon
ppb	parts per billion
ppd	pounds per day
ppm	parts per million
ppm/ft	parts per million per foot
ppt	parts per thousand
PREC	Pesticide Registration and Evaluation Committee
RBDD	Red Bluff Diversion Dam
Reclamation	U.S. Bureau of Reclamation
redox	reduction-oxidation
RIMS II	Regional Input-Output Modeling System
RMA	Resource Management Associates
ROG	reactive organic gases
SAFCA	Sacramento Area Flood Control Agency
SB	Senate Bill
SCS	U.S. Soil Conservation Service
SDS	simulated distribution system
SESO	Sacramento Endangered Species Office
SFBAAB	San Francisco Bay Area Air Basin
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SJCCDD	San Joaquin County Community Development Department
SJCGP	San Joaquin County General Plan
SJCMAD	San Joaquin County Mosquito Abatement District
SJVAB	San Joaquin Valley Air Basin
SJVUAPCD	San Joaquin Valley Unified Air Pollution Control District
SLC	California State Lands Commission
SMAQMD	Sacramento Metropolitan Air Quality Management District
SNV	specific numerical value
SO <sub>4</sub> <sup>2-</sup>	sulfate
SR	State Route
SS	suspended sediments

SWP	State Water Project
SWRCB	California State Water Resources Control Board
SWTR	Surface Water Treatment Rule
TAF	thousand acre-feet
TAF/yr	thousand acre-feet per year
TDS	total dissolved solids
TFPC	total formation potential carbon
THM	trihalomethane
THMFP	trihalomethane formation potential
TOC	total organic carbon
tpy	tons per year
TSMP	Toxic Substances Monitoring Program
USC	U.S. Government Code of Regulations
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UVA	ultraviolet light absorptance
UVM	ultrasonic velocity meter
V/C	volume-to-capacity ratio
VELB	valley elderberry longhorn beetle
WAPA	Western Area Power Administration
WTP model	water treatment plant model

